

DOCUMENTED CHROMOSOME NUMBERS OF PLANTS

(See Madroño 9: 257-258, 1948)

SPECIES	NUMBER	COUNTED BY	COLLECTION	LOCALITY
POLYGONACEAE				
<i>Eriogonum inflatum</i> Torr. & Gray	n = 16	D. Stone & P. Raven UC ¹	Raven 10850 UC	Road to Panoche, San Benito County, Calif.
SCROPHULARIACEAE				
<i>Castilleja</i> <i>breviloba</i> 'a Piper	n = 12	L. R. Heckard ILL	Heckard 267 JEPS	Northeast of Gasquet, Del Norte County, Calif.
<i>chromosa</i> A. Nels.	n = 12	L. R. Heckard ILL	Bacigalupi (& Heckard) 4252 JEPS	Northwest of Baldwin Lake, San Bernardino Mts., San Bernardino County, Calif.
* <i>inflata</i> Pennell	n = 36	L. R. Heckard ILL	Heckard 800 JEPS	Point Reyes light-house, Marin County, Calif.
<i>integra</i> A. Gray	n = 12	L. R. Heckard ILL	P. C. Silva, 29 Aug. 1955 JEPS	19 miles east of Springerville, Apache County, Ariz.
<i>linariaefolia</i> Benth.	n = 12	L. R. Heckard ILL	Mason 14563 JEPS	East of Campito Mt., White Mts., Mono County, Calif.
<i>pilosa</i> S. Wats.) Rydb.	n = 12	L. R. Heckard ILL	Bacigalupi 4295 JEPS	Franktown, Washoe County, Nev.
<i>roseana</i> Eastw.	n = 12	L. R. Heckard ILL	Bacigalupi (& Heckard) 4052, 4053 JEPS	City Creek Canyon, San Bernardino Mts., San Bernardino County, Calif.
<i>roseana</i> Eastw.	n = 12	L. R. Heckard ILL	Heckard 493 JEPS	Lewis Creek Road, Monterey County, Calif.
<i>stenantha</i> A. Gray	n = 12	L. R. Heckard ILL	Bacigalupi (& Heckard) 4085 JEPS	Potrero Creek, near Barrett Junction, San Diego County, Calif.
COMPOSITAE				
<i>Bidens laevis</i> (L.) B. S. P.	n = 11	A. M. Torres UNM	Torres 52 UNM	Bernalillo County, New Mexico
<i>Borrichia</i> <i>arborescens</i> (L.) DC.	2n = 28	R. T. Neher IND	Heiser 3195 IND	Dade County, Florida

* Prepared slide available.

¹ Symbols for institutions are those listed by Lanjouw and Stafleu, Index Herbariorum, Part I. Third Edition, 1956, Utrecht.

SPECIES	NUMBER	COUNTED BY	COLLECTION	LOCALITY
<i>frutescens</i> (L.) DC.	2n = 28	R. T. Neher IND	Heiser 3205 IND	Manatee County, Florida
<i>Simsia</i> <i>grandiflora</i> Benth.	n = 17	C. B. Heiser IND	Heiser R7 IND	San Salvador, Salvador
<i>polycephala</i> Benth.	n = 17	C. B. Heiser IND	Heiser R5 IND	Antigua, Guatemala
<i>Thelesperma</i> <i>intermedium</i> Rydb.	n = 8	A. M. Torres UNM	Torres 12 UNM	Bernalillo County, New Mexico
<i>longipes</i> Gray	n = 10	A. M. Torres UNM	Torres 18 UNM	Otero County, New Mexico
<i>megapotamicum</i> (Spreng.) Kuntze	n = 11	A. M. Torres UNM	Torres 10 UNM	Socorro County, New Mexico
<i>subnudum</i> Gray	n = 12	A. M. Torres UNM	Torres 23 UNM	San Juan County, New Mexico

APOMIXIS IN THE GRAMINEAE. TRIBE ANDROPOGONEAE: HETEROPOGON CONTORTUS

W. H. P. EMERY AND W. V. BROWN

Heteropogon contortus (L.) Beauv. ex Roem. & Schult. consists of a relatively uniform series of populations with an extensive native range throughout most of the tropical and sub-tropical grassland regions of the world. In parts of the Hawaiian Islands, Australia, Indo-Malaya, India, Asia Minor, Africa, Europe, and the Americas it forms an important part of the range forage. The species is both palatable and nutritious, but when mature the plants produce fertile spikelets which have a sharply pointed callus and a stout hairy awn. These spikelets may penetrate the skin or lining of the digestive tract (Pammel, 1911), causing severe irritation and infection. They may even affect the general health of grazing animals (Chippindall, 1954).

Previous cytological studies of *H. contortus* from various parts of the world have shown that many of the populations which comprise this species are characterized by highly irregular meiotic divisions. Gould (1956) reported that some irregularities were observed in meiotic divisions of the pollen mother cells (PMC's) in six collections from Texas and northern Mexico. Mehra (1954) examined six collections from India and reported varying numbers of univalent, bivalent, trivalent, and quadrivalent configurations in the microsporocytes of each collection. On the other hand, Celarier and Harlan (1953) examined collections from Tanganyika, India, Australia, and Madagascar and noted a high degree of irregularity in the